Work Orde February-21-13				*975	82*						Page 1
Item ID: Revision ID: Item Name:	D4000-045	itting Assemby	A	Accept	*N900	040	100)* s	etup Sta	I VI	S1* S2*
Start Date: Required Date: Reference:	2/20/13	Start Qty: 2.00 Req'd Qty: 2.00	*2* *2*		Cust Item I Customer:	D:				I	
Approvals:		in: MLJ		Tooling: SPC (Y/N):		ate:		R	kun Sta Sto	1/1	R1* R2*
Sequence ID/ Work Center I	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Rev	ision Nbr									
D4000	A			,							
*100 *100* Large Fab Large Fab		Weld per dwg A/R Alu Memo	minum rod Batch: <u>/ 123</u> 20	0.00			- 1	2	4		M 13.04.
110 *110* QC Quality Control		QC9- Inspect visual per	QSI004- Fusion Welds	0.00				- Ø	B-0	1-09	(DAS 09
120 *120* oc		QC5- Inspect part comp	leteness to step on W/O	0.00					13-au	, 05	DAS
Quality Control		1vaCiiiV									× 89

NCR: Y	es / No)			WORK ORDER NON-C	100	VFORM	MANCE / UPC	DATE					
								4.		(QA Closed:	Da	ite:	
Work Orde	er:				DISPOSITION	7			AGAINST D	EP.	ARTMENT/			
Part N	lo				Rework Scrap Use-as-is			Skid-tube Machining noforming	Crosstube Small Fab Finishing	-		Water Jet d. Eng. Coor. e/Packaging		Engineering Quality Other
NCR N	lo				Work Order Update]	ŧ .	Large Fab	Composite	1		Supplier		
Root				Descri	ption of work order update		Initial	Acti	ion		Sign &			
Cause	Date	Step	Qty		or Non-conformance	Ch	ief Eng	Descr	iption		Date	Verification	n	QC Inspector
Doc/Data														
Equip/Tooling										İ				
Operator														
Material				·										
Setup	_			1										
Other						1								
Process	_		1								ļ			
Supplier	_													
Training		ļ								Ì				
Unapproved		<u> </u>												
	***					AUL	T CATE	GORY						
Landir	ng Gear			_	General		1		_	\neg				1_
	Bendin	-			Bend	-	Grain		<u> </u>	—	Ovalized		<u> </u>	Pressure/Forced
9.		Not Conce	ntric to	o/s	BOM/Route	_	Hardwa		-	—	Over/Under		\vdash	Temperature/Cure
-	Cracks				Broken/Damaged		1	ion Incomplete	-		Part Incorrec		-	Weld
1		d/Crimped		<u> </u>	Burrs	_	-;	tions Incomplete/U	Inclear –	-	Part Lost/Mi	ssing		Wrong Stock Pulled
	Cuffs			<u> </u>	Contamination	\vdash	Mainte		 		Part Moved			
	Heat Ti				Countersink	<u> </u>	Mislabe		<u> </u>		Positioned W	-		اما
,		ion Strip ir	1 Tube		Cut Too Short	<u></u>	Misread	į	L		Power Loss/:	Surge		Other
1	→	in Bend			Drill Holes	<u></u>	Offset			_				
	Torque	Waves in	Extrusio	n	Drawing	L	Out of (Calibration		_				

Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

0.00

Identify as per dwg & Stock Location: WA+ 003 0.00

Memo

130

120

Packaging

Packaging

			DQA:	Date:	
NCR:	Yes / No	WORK ORDER NON-CONFORMANCE / UPDATE			
	,		OA Closed:	Date:	

												QA Closea.		acc.	
Work Orde	or:					DISPOSITION		AGAINST DEPARTMENT/PROCESS							
Work Orde	:I ·					Rework	1		Skid-tube	Crosstube			Water Je	t□	Engineering
Part N	lo.					Scrap		ſ	Machining Small Fab		-	Prod. Eng. Coor.			Quality
raiti	' '					Use-as-is			noforming	Finishing	-	l	re/Packagin	_	Other
NCR N	lo.					Work Order Update			Large Fab	Composite	-	,	Supplie	_	
	MCK (10.						'			, , , , , , , , , , , , , , , , , , , ,		1			
Root					Descri	ption of work order update	In	itial	Ac	ction		Sign &			
Cause		Date	Step	Qty	(or Non-conformance	Chi	ef Eng	Desc	cription		Date	Verificati	on	QC Inspector
Doc/Data															
Equip/Tooling													,	ļ	
Operator															,
Material									•						
Setup															
Other							ļ								
Process															
Supplier															
Training															
Unapproved															
-						F/	AULT	CATE	GORY						
Landir	ng Gear	r				General						_		′	i
`	Ber	nding				Bend		Grain				Ovalized			Pressure/Forced
	Cer	ntre No	t Concer	itric to	o/s	BOM/Route		Hardwa	re			Over/Under	tolerance		Temperature/Cure
	Cra	icks				Broken/Damaged		nspecti	on Incomplete			Part Incorre	ct		Weld
	Cru	ished/C	rimped.			Burrs		nstruct	ions Incomplete,	/Unclear		Part Lost/Mi	issing		Wrong Stock Pulled
	Cuf	ffs				Contamination		Mainte	nance			Part Moved			
	He	at Treat				Countersink		Mislabe	led			Positioned V	Vrong		
	Ins	pection	Strip in	Tube		Cut Too Short		Misread	i			Power Loss/	Surge		Other
	Rip	ples in	Bend			Drill Holes		Offset				-			
İ	Tor	que Wa	aves in E	xtrusio	n $lacksquare$	Drawing	\Box	Out of (Calibration						
			quence			Finish	\prod_{i}	Out of S	Sequence						
	Wa	ve/Twi	st in Tub	e		Folio	\Box	Outside	Dimensions						

Work Order ID 97582 February-21-13 2:38:57 PM				*97	582*					W		Page 3	
Item ID: Revision ID: Item Name:	D4000-045	Fitting Assemby		Accept	*N900	00040100*				Start Stop		S1* S2*	
Start Date: Required Date	2/20/13 e: 2/28/13	Start Qty: 2.00 Req'd Qty: 2.00	*2* *2*		Cust Item I Customer:	D:							
Reference:				T P			_		Run	Start	*N	R1*	
Approvals:	Process P QC:	lan:	Date:	Tooling: SPC (Y/N):	Date:				Stop		R2*		
Sequence ID/ Work Center	ID	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accep Qty	t Rej Qty	•	Reject Number	Insp. Stamp	
*140		QC21- Final Inspection	Work Order Release	0.00					1	3/4/	109		
QC		Memo		0.00									

Quality Control

M13-ox10

												DQA:	Date:	
NCR:	Yes /	No				WORK ORDER NON-C	10	NFORM	/ANCE / UP	DATE			,	
								***				QA Closed:	Date:	·
Work Ord	or:					DISPOSITION		AGAINST DEPARTME					PROCESS	
, Work Ordi	ei					Rework		Skid-tube Crosstube			ıhe□		Water Jet	Engineering
Part f	No.					Scrap			Machining	Small	J	Pro	d. Eng. Coor.	Quality
•	·					Use-as-is			noforming	Finish	ing	Rec/Stor	e/Packaging	Other
NCR I	No					Work Order Update			Large Fab	Compos	site 🔙		Supplier	· 🔲
								<u></u>						
Root						ption of work order update	1	nitial		tion		Sign &		
Cause	D	ate	Step	Qty		or Non-conformance	Ch	ief Eng	Desc	ription		Date	Verification	QC Inspector
Doc/Data	Ш													
Equip/Tooling	Ш													
Operator	Ш													
Material	H													
Setup									·					
Other	\vdash								·					
Process	Ш													
Supplier	\square													
Training														
Unapproved	<u> </u>			<u></u>		-	<u> </u>						L	
					· ·		AUL	T CATE	JURY					
Landi	ng Gear					General		lc:-				Ovalized		Pressure/Forced
	⊢	ding			o/s	Bend BOM/Boute		Grain			} —	Ovalized Over/Under	talaransa	Temperature/Cure
	\vdash		t Concer	ntric to	U/S	BOM/Route	-	Hardwa				•		Weld
	Crac					Broken/Damaged			on Incomplete	/1.1	\vdash	Part Incorre	 	
	⊢		Crimped.		-	Burrs	\vdash	i	ions Incomplete,	Unclear	-	Part Lost/Mi	SSIRIE	Wrong Stock Pulled
	Cuff					Contamination	<u> </u>	Mainte			_	Part Moved	M	
	⊢⊣	t Trea			<u> </u>	Countersink	\vdash	Mislabe		•	_	Positioned V		7
	i ilnsn	ection	i Strin in	Tube	1	Cut Too Short	1	Misread	1		1	Power Loss/	Surge I	Other

Offset

Out of Calibration
Out of Sequence

Outside Dimensions

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drill Holes

Drawing

Finish Folio

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Page 1

Work Order ID:

97582

Parent Item:

D4000-045

Parent Item Name:

Fuel Pickup Fitting Assemby

Start Date: .2/20/13

Required Date: 2/28/13

Start Qty: 2.00

Required Qty: 2.00

Comments:

IPP rev A 10.01.20 new issue Prelim EC verified by:DD

IPP rev B 10.05.13 ecn10-562

	EC verified by:DD												
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4000-11	٠.	Manufactured	No			100	Each	19.0000	1	2	R	13.04	1.09
Cap				Location		Loc Qty	<u>Lo</u>	c Code					 (
				WA003	29	19 19				2	1		
D4000-7 Fuel Pickup Fitting		Manufactured	No	B 9-	1550	700	Each	0.0000	1	2	M	13.0	4.09
D4003-5 Fuel Pick Up Line		Manufactured	No			-(2)	Each	2.0000	1	2	M	, 13.00	1.09
				Location		Loc Qty	Lo	c Code					
				WA003 8591	19	2 2				2			

				DQA:	Date: _	
NCR: Yes / No	WORK ORDER NON-CO	NFORMANCE / UP			Data	
				(A Closed:	Date:	
Work Order:	DISPOSITION		AGAINST DEP	ARTMENT/PRO	CESS	
work order.	Rework	Skid-tube	Crosstube	w	ater Jet	Engineering
Part No.	Scrap	Machining	Small Fab	Prod. En	g. Coor.	Quality
	Use-as-is	Thermoforming	Finishing	Rec/Store/Pa	ckaging	Other
NCR No.	Work Order Update	Large Fab	Composite	9	Supplier	

Description of work order update Sign & Initial Action Root or Non-conformance Chief Eng Description Date Verification QC Inspector Cause Date Step Qty Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved **FAULT CATEGORY Landing Gear** General Grain Ovalized Pressure/Forced Bend Bending BOM/Route Temperature/Cure Hardware Over/Under tolerance Centre Not Concentric to O/S Broken/Damaged Part Incorrect Weld Inspection Incomplete Cracks Part Lost/Missing Wrong Stock Pulled Crushed/Crimped. Instructions Incomplete/Unclear Burrs Part Moved Cuffs Contamination Maintenance

Mislabeled

Out of Calibration

Out of Sequence

Outside Dimensions

Misread

Offset

Countersink

Cut Too Short

Drill Holes

Drawing

Finish Folio Positioned Wrong

Power Loss/Surge

Other

Ripples in Bend

Turning Sequence

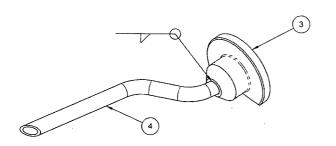
Wave/Twist in Tube

Heat Treat

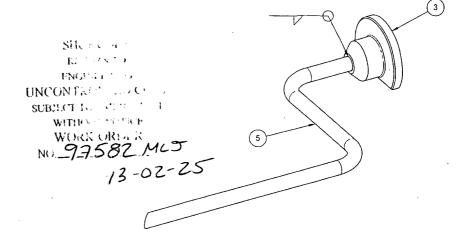
Inspection Strip in Tube

Torque Waves in Extrusion

ITÈM	QTY. -043	QTY. -045	P/N	DESCRIPTION	JOHN CAMERON AVIATION PART NUMBER
1	х		D4000-041	DRAIN FITTING ASSEMBLY, AFT	JCA-M47-1-06
2		х	D4000-043	DRAIN FITTING ASSEMBLY, FWD	JCA-M47-1-15
3	1	1	D4000-3	FUEL SUMP DRAIN FITTING	
4	11		D4003-1	INTERNAL DRAIN LINE, AFT	
. 5	L	1	D4003-3	INTERNAL DRAIN LINE, FWD	



D4000-041 DRAIN FITTING ASSEMBLY, AFT



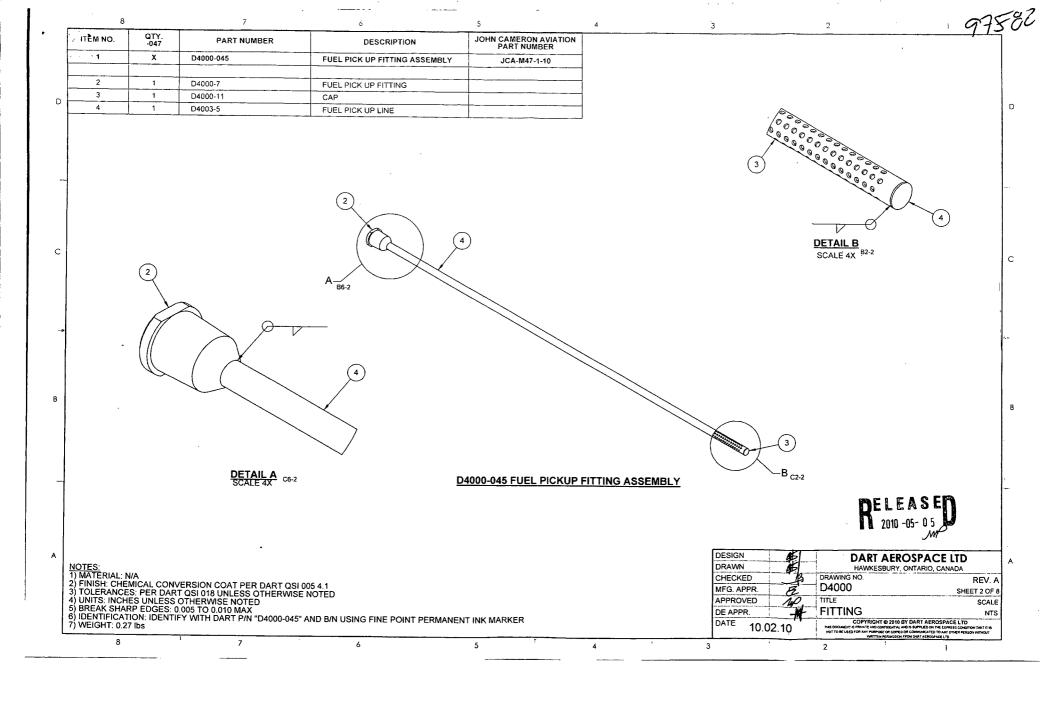
D4000-043 DRAIN FITTING ASSEMBLY, FWD

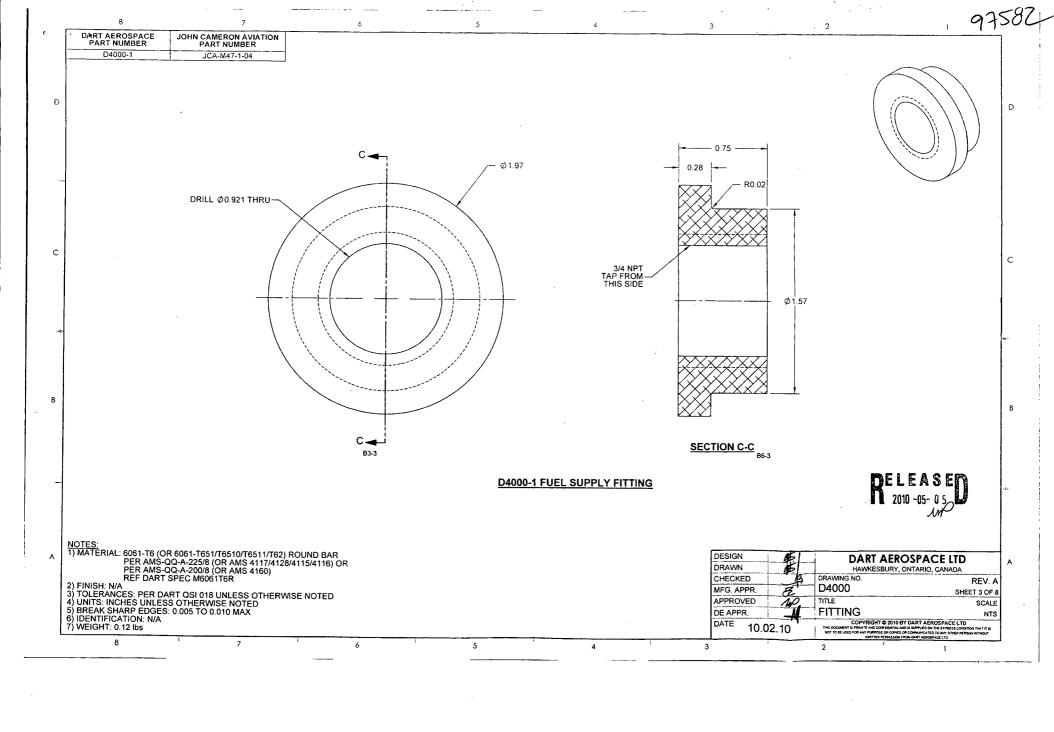
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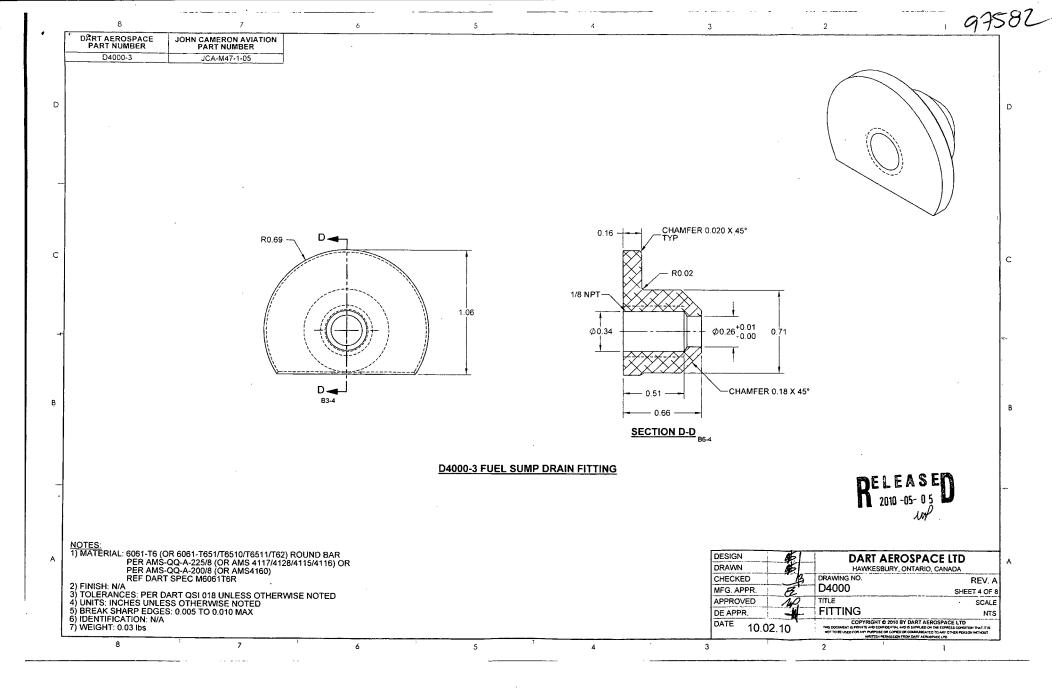
С

Α	NEW ISS	SUE		\$	10.02.10
REV.			DESCRIPTION	BY	DATE
DESIG	N j	1	DART AE	ROSPACE L	ľD
DRAW	N	1		Y, ONTARIO, CANAL	
CHECKED		B	DRAWING NO.		REV. A
MFG. A	PPR.	_ 3	D4000		SHEET 1 OF 8
APPRO	VED	140	TITLE		SCALE
DE APP	PR.	-#-	FITTING		NTS
DATE	10.0	2.10	THIS DOCUMENT IS PRIVATE AND CONFIDENTS NOT TO BE USED FOR ANY PURPOSE OR CON	ID BY DART AEROSPACE ALANCIS SUPPLED ON THE DUPRESS PED OR COMMUNICATED TO ANY OTHER ION FROM DART AEROSPACE LTD	CONDITION THAT IT IS

NOTES:
1) MATERIAL: N/A
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4000-043/-045" AND B/N USING FINE POINT PERMANENT INK MARKER
7) WEIGHT: D4000-043 - 0.04 lbs
D4000-045 - 0.05 lbs







DART AEROSPACE PART NUMBER JOHN CAMERON AVIATION PART NUMBER D4000-5 JCA-M47-1-09 D D - Ø1.57 -- 0.59 R0.02 DRILL Ø0.578 THRU-C 3/8 NPT TAP FROM — THIS SIDE 0.98 0.12 ---SECTION E-E B6-5 B3-5 **D4000-5 FUEL TANK VENT FITTING** NOTES: 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) ROUND BAR PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR PER AMS-QQ-A-200/8 (OR AMS 4160) REF DART SPEC M6061T6R DESIGN DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWN REF DART SPEC M6061T6R

2) FINISH: N/A

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: N/A

7) WEIGHT: 0.04 lbs CHECKED DRAWING NO. REV. A D4000 MFG. APPR. SHEET 5 OF 8 APPROVED TITLE SCALE

7

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